

Patent claims:

1. A side-chain-modified copolymer wax composed of long-chain olefins, of acrylic esters and acrylic acid, and/or of acrylamides, which is prepared from waxy copolymers of long-chain α -olefins having from 18 to 60 carbon atoms, methyl acrylate, acrylic acid, and/or from acrylamides whose carboxy functionality has been modified via chemical reaction with nucleophilic components.
2. The side-chain-modified copolymer wax as claimed in claim 1, wherein the nucleophilic components are long-chain alcohols, perfluoroalkyl alcohols, short-chain amines, long-chain amines, and/or amino alcohols.
3. The side-chain-modified copolymer wax as claimed in claim 1 or 2, wherein the long-chain alcohols are tallow fatty alcohol, coconut fatty alcohol, oxo alcohols, and/or Guerbet alcohol.
4. The side-chain-modified copolymer wax as claimed in claim 1 or 2, wherein the perfluoroalkyl alcohols are C₈-C₁₈-perfluoroalkylpropanol and distillate cuts of these alcohols.
5. The side-chain-modified copolymer wax as claimed in claim 1 or 2, wherein the short-chain amines are compounds such as butylamine, dimethylaminopropylamine, diethylaminoethanol, tetramethylpiperidinol, and/or triacetonediamine.
6. The side-chain-modified copolymer wax as claimed in claim 1 or 2, wherein the long-chain amines are compounds such as octylamine, decylamine, dodecylamine, tallow fatty amine, coconut fatty amine, didecylamine, and/or cyclohexylamine.
7. The side-chain-modified copolymer wax as claimed in claim 1 or 2, wherein the alkanolamines are diethylaminoethanol, 2,2,6,6-tetramethylpiperidinol, N-methyl-2,2,6,6-tetramethylpiperidinol, N-acetyl-2,2,6,6-tetramethylpiperidinol and/or 2,2,6,6-tetramethylpiperidinol N-oxide.
8. A process for the preparation of side-chain-modified copolymer

waxes as claimed in one or more of claims 1 to 7, which comprises first reacting long-chain α -olefins having from 18 to 60 carbon atoms with acrylic esters, acrylic acid, and/or with acrylamides, to give long-chain copolymer waxes, and then reacting these with nucleophilic components to 5 give the side-chain-modified copolymer waxes.

9. The process as claimed in claim 8, wherein the nucleophilic components are long-chain alcohols, such as tallow fatty alcohol, coconut fatty alcohol, oxo alcohols, and/or Guerbet alcohol; perfluoroalkyl alcohol, 10 such as C₈-C₁₈-perfluoroalkylpropanol, and distillate cuts of these alcohols; short-chain amines, such as butylamine, dimethylaminopropylamine, diethylaminoethanol, tetramethylpiperidinol, and/or triacetonediamine; long-chain amines, such as octylamine, decylamine, dodecylamine, tallow fatty 15 amine, coconut fatty amine, didecylamine, and/or cyclohexylamine, and/or alkanolamines, such as diethylaminoethanol, 2,2,6,6-tetramethylpiperidinol, N-methyl-2,2,6,6-tetramethylpiperidinol, N-acetyl-2,2,6,6-tetramethylpiperidinol and/or 2,2,6,6-tetramethylpiperidinol N-oxide.

10. The use of side-chain-modified copolymer waxes as claimed in at 20 least one of claims 1 to 7 in emulsified form for coatings and water repellancy.

11. The use of side-chain-modified copolymer waxes as claimed in at least one of claims 1 to 7 in micronized form as matting agents, slip agents, 25 antiscratch agents, or to improve chemicals resistance.

12. The use of side-chain-modified copolymer waxes as claimed in at least one of claims 1 to 7 as processing aids for plastics in the form of lubricants, dispersing agents, and/or light stabilizers.